

ABSTRACT

A computer aided design system and a computer aided design program which can greatly increase the utility of a computer aided design model, and can improve the efficiency of design and production processes, by adopting a curved surface theory which ensures the continuity of a free-form line or surface. A computer executes: a point sequence information extraction process for extracting a plurality of point sequences on a curved surface; a dividing process for generating a curved surface from the point sequences and dividing the curved surface into a predetermined number of mesh points; a first fundamental form computing process for computing coefficients of the first fundamental form; a second fundamental form computing process for computing coefficients of the second fundamental form; and a storage process for storing the point sequence information, the coefficients of the first fundamental form and the coefficients of the second fundamental form.